## Tool 18 Unified Subwatershed and Site Reconnaissance (USSR) Field Forms

The Center for Watershed Protection's USSR is a rapid field survey to evaluate potential pollution sources and restoration opportunities within urban subwatersheds. The USSR is designed to assess upland areas outside the stream corridor for behaviors that can influence water quality and to identify promising restoration project opportunities. For more details on the USSR and guidance for completing the field forms, see Wright *et al.*, 2004.

## Neighborhood Source Assessment



WATERSHED:	SUBWATERSHED:	Unique Site ID:					
DATE:/	ASSESSED BY:	CAMERA	Pic#:				
A. NEIGHBORHOOD CHARACTERIZ	ZATION						
Neighborhood/Subdivision Name: Neighborhood Area (acre							
If unknown, address (or streets) surveyed	<b>l</b> :						
Homeowners Association? Y N	Unknown If yes name and contac	et information:					
Residential (circle average single family		_					
☐ Single Family Attached (Duplexes, R	ow Homes) $< \frac{1}{8}$ $\frac{1}{8}$ $\frac{1}{4}$ $\frac{1}{3}$ $\frac{1}{3}$ ac	ere Multi	family (Apts, Townhom	nes, Condos)			
Single Family Detached	$<\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{2}$ 1 >1 ac		e Home Park				
Estimated Age of Neighborhood:	years Percent of Homes with Garag	es:% W	ith Basements%	INDEX*			
Sewer Service?  Y N				0			
Index of Infill, Redevelopment, and Rem	odeling No Evidence < 5% or	f units   5-109	<b>10%</b>	0			
Record percent observed for each depending on applicability		Percentage	Comments/Notes				
B. YARD AND LAWN CONDITIONS							
<b>B1.</b> % of lot with impervious cover							
<b>B2.</b> % of lot with grass cover				0			
B3. % of lot with landscaping (e.g., mulched bed areas)							
<b>B4.</b> % of lot with bare soil							
*Note: B1 through B4 must tota	l 100%						
<b>B5.</b> % of lot with forest canopy				$\Diamond$			
<b>B6.</b> Evidence of permanent irrigation or	"non-target" irrigation			0			
		High:		0			
<b>B7.</b> Proportion of <i>total neighborhood</i> tur management status:	f lawns with following	Med:					
management status.		Low:					
<b>B8.</b> Outdoor swimming pools? \( \subseteq Y \subseteq N	Can't Tell Estimated #			0			
<b>B9.</b> Junk or trash in yards?	N Can't Tell			0			
C. DRIVEWAYS, SIDEWALKS, AND	CURBS						
C1. % of driveways that are impervious	□ N/A						
C2. Driveway Condition  Clean	Stained Dirty Breaking up			0			
C3. Are sidewalks present? \( \subseteq Y \subseteq N							
☐ Spotless ☐ Covered with lawn clippings/leaves ☐ Receiving 'non-target' irrigation							
What is the distance between the sidewalk and street? ft.							
Is pet waste present in this area?  Y N N/A							
C4. Is curb and gutter present? ☐ Y ☐ N If yes, check all that apply: ☐ Clean and Dry ☐ Flowing or standing water ☐ Long-term car parking ☐ Sediment							
<u></u>	· · · · · · · · · · · · · · · · · · ·			0 0			
☐ Organic matter, leaves, lawn clippings ☐ Trash, litter, or debris ☐ Overhead tree canopy							

D. ROOFTOPS																
D1. Downspouts are directly connected to storm drains or sanitary sewer										$\Diamond$	(	)				
D2. Downspouts are directed to impervious surface																
D3. Downspouts discharge to pervious area																
<b>D4.</b> Downspouts discharge to a cistern, rain barrel, etc.																
*Note: C1 through C4 should total 100%																
<b>D5.</b> Lawn area present downgradient of leader for rain garden?		Υ	]N											•	<u> </u>	
E. COMMON AREAS	E. COMMON AREAS															
E1. Storm drain inlets?  Y N If yes, are they stenciled?  Catch basins inspected? Y N If yes, include U										Dirt	y				<b>♦</b> 0	
E2. Storm water pond?  Y N Is it a wet pond or What is the estimated pond area? < 1 acre about	dry	pon	ıd?	Is	it o						N			1	$\Diamond$	
E3. Open Space? Y N If yes, is pet waste present?							Υ [	□ N	1					-	0	
Buffers/floodplain present:  Y N If yes, is encr																
F. INITIAL NEIGHBORHOOD ASSESSMENT AND RECOMM																
Based on field observations, this neighborhood has significant indicators for the following: (check all that apply)  Nutrients Oil and Grease Trash/Litter Bacteria Sediment Other								0								
Recommended Actions	De	scri	be R	Reco	mm	ende	ed A	ctio	ns:				•			
<ul> <li>☐ Onsite retrofit potential?</li> <li>☐ Better lawn/landscaping practice?</li> <li>☐ Better management of common space?</li> <li>☐ Pond retrofit?</li> <li>☐ Multi-family Parking Lot Retrofit?</li> <li>☐ Other action(s)</li> </ul>																
Initial Assessment																
NSA Pollution Severity Index  Severe (More than 10 circles checked) High (5 to 10 circles checked) Moderate (Fewer than 5 circles checked) None (No circles checked) Neighborhood Restoration Opportunity Index																
High (More than 5 diamonds checked)																
Moderate (3-5 diamonds checked)																
Low (Fewer than 3 diamonds checked)																

NOTES:



WATERSHED:	SUBWATERSHED:		UNIQUE SITE	ID:			
DATE://	ASSESSED BY:	CAMERA ID:		PIC#:			
MAP GRID:	LAT'_	" LONG°	_''	LMK#			
A. SITE DATA AND BASIC CLASSIFICATION							
Name and Address:	<i>z</i> , <u>—</u>	nmercial Industrial Industrial Municipal	Miscellaneous  Golf Course				
		nsport-Related	Marina				
	<ul><li>Basic Description of</li></ul>	Operation:	Animal Faci	lity			
SIC code (if available): NPDES Status:  Regulated	Basic Description of	Operation.					
Unregulated Unknown				INDEX*			
B. VEHICLE OPERATIONS N/A (Skip to	o part C)		Observed P	Collution Source?			
<b>B1.</b> Types of vehicles:	School buses Ot	her:	-				
<b>B2.</b> Approximate number of vehicles:							
<b>B3.</b> Vehicle activities ( <i>circle all that apply</i> ):	•	•	shed Stored	0			
<b>B4.</b> Are vehicles stored and/or repaired outs Are these vehicles lacking runoff diversion		an't Tell □ Can't Tell		0			
<b>B5.</b> Is there evidence of spills/leakage from		Can't Tell		0			
<b>B6.</b> Are uncovered outdoor fueling areas pro	esent?  Y N	Can't Tell		0			
<b>B7.</b> Are fueling areas directly connected to	storm drains?	N Can't Tell		0			
B8. Are vehicles washed outdoors?  Y N Can't Tell							
Does the area where vehicles are washed discharge to the storm drain? Y N Can't Tell							
C. OUTDOOR MATERIALS N/A (Skip to part D)  Observed Pollution Source?							
C1. Are loading/unloading operations present?  Y N Can't Tell  If yes, are they uncovered <i>and</i> draining towards a storm drain inlet?  Y N Can't Tell							
C2. Are materials stored outside? \( \text{Y} \) \( \text{N} \) \( \text{Can't Tell} \) If yes, are they \( \text{Liquid} \) \( \text{Solid Description:} \)							
Where are they stored?  grass/dirt area  concrete/asphalt  bermed area							
<b>C3.</b> Is the storage area directly or indirectly		·	N Can't Te	0			
C4. Is staining or discoloration around the area visible?  \[ Y \] N \[ Can't Tell							
C5. Does outdoor storage area lack a cover?	Y N Can'	t Tell		0			
<b>C6.</b> Are liquid materials stored <i>without</i> second	ondary containment?	✓ N Can't Tell		0			
C7. Are storage containers missing labels of	in poor condition (rusting	;)?	n't Tell	0			
D. WASTE MANAGEMENT N/A (Skip	to part E)		Observed P	Collution Source?			
<b>D1.</b> Type of waste (check all that apply):	Garbage Construct	tion materials	dous materials	0			
<b>D2.</b> Dumpster condition ( <i>check all that app</i> evidence of leakage (stains on ground)	Overflowing		ondition L	eaking or O			
<b>D3.</b> Is the dumpster located near a storm dra If yes, are runoff diversion methods (be		Can't Tell ′		0			
E. PHYSICAL PLANT N/A (Skip to part	F)		Observed P	Pollution Source?			
<b>E1.</b> Building: Approximate age:	yrs. Condition of surface	ces: Clean Stain	ed Dirty	Damaged O			
Evidence that maintenance results in discharge to storm drains (staining/discoloration)?  Y Don't know							
*Index: O denotes potential pollution source; denotes confirmed polluter (evidence was seen)							



E2. Parking Lot: Approximate age yrs. Condition: ☐ Clean ☐ Stained ☐ Dirty ☐ Breaking up  Surface material ☐ Paved/Concrete ☐ Gravel ☐ Permeable ☐ Don't know										0										
E3. Do downspouts discharge to impervious surface?  Y N Don't know None visible  Are downspouts directly connected to storm drains?  Y N Don't know										0										
<b>E4.</b> Evidence of poor cleaning practices for construction activities (stains leading to storm drain)?  Y N Can't Tell								11	1	0										
<b>F. TURF/LANDSCAPING AREAS</b> N/A (skip to part G)									C	bse	erv	ed ]	Poll	luti	on S	Sou	rce	?		
F1. % of site with: Forest canopy% Turf grass % Lan	idsc	apir	ng _		_%	Ва	re S	Soil		_%	ó								0	
<b>F2.</b> Rate the turf management status:  High  Medium  L	ow																	,	0	
F3. Evidence of permanent irrigation or "non-target" irrigation \( \sum \) Y \( \sum \) N \( \sum \) Can't Tell											0									
<b>F4.</b> Do landscaped areas drain to the storm drain system?											0									
F5. Do landscape plants accumulate organic matter (leaves, grass clippings)	on a	adja	cent	t im	perv	/iou	s su	rface	e? [	] }	Y [	] N		Ca	n't	Tel	l		0	
G. STORM WATER INFRASTRUCTURE N/A (skip to part	t <b>H</b> )								C	bse	erv	ed ]	Poll	luti	on S	Sou	rce	?_		
<b>G1.</b> Are storm water treatment practices present? $\square$ Y $\square$ N $\square$ U	Unk	nov	vn .	If y	es,	plea	ise (	desc	cribe	e: _								(	0	
<b>G2.</b> Are private storm drains located at the facility? $\square$ Y $\square$ N $\square$ Is trash present in gutters leading to storm drains? If so, con					ex b	elo	w.											(	0	
Index Rating for	Ac	cun	nula	atio	n in	Gu	tter	S												
Clean Sediment 1 2	] 3					$\overline{\Box}$	4			Filt	thy I	$\overline{}$	5							
Organic material 1 2	$\frac{1}{3}$					=	4				ļ	_	5							
Litter	3					_	4						5							
G3. Catch basin inspection – Record SSD Unique Site ID here:			С	ond	litio	n: [		Dirt	y [		Clea	an								
H. INITIAL HOTSPOT STATUS - INDEX RESULTS																				
Not a hotspot (fewer than 5 circles and no boxes checked) P				-													10			
Confirmed hotspot ( 10 to 15 circles and/or 1 box checked) S Follow-up Action:	ever	re n	otsr	oot	(>1	5 C1	rcle	s ar	1d/0	r 2	or i	moi	e bo	oxe	s ch	eck	ea)	$\overline{}$	$\overline{}$	
Refer for immediate enforcement	_													$\vdash$		-	_	-	-	
Suggest follow-up on-site inspection	$\dashv$	-												$\vdash \vdash$		$\dashv$	$\dashv$	$\dashv$	$\dashv$	
Test for illicit discharge														$\vdash$			_			
☐ Include in future education effort☐ Check to see if hotspot is an NPDES non-filer☐																		_	_	
Onsite non-residential retrofit																				
Pervious area restoration; complete PAA sheet and record															1					i)
Unique Site ID here:																				
Schedule a review of storm water pollution prevention plan																				
Notes:	T																			
	$oxed{oxed{J}}$																			
							Ī							ΙĪ	Ī					i



WATERSHED:	SUBWATERSHED:								
DATE:/	ASSESSED BY:	CAMER	A ID:	PIC #:					
MAP GRID:	LAT°'LONG	<u> </u>	LMK#						
A. PARCEL DESCRIPTION									
Size:acre(s) Access to s Ownership: Derivate Du Other (please describe) Contact Information: Connected to other pervious a Estimated size of connected po	rea? Y N If yes, what	School Par	rk Right-of-w	vay Vacant land					
PART I. NATURAL AREA REMNANT									
FOR	EST		WETLAND	)					
B. CURRENT VEGETATIVE			EGETATIVE COV						
B1. Percent of forest with the Open% Partly shaded *Note - these should total 100 B2. Dominant tree species:  B3. Understory species:  B4. Are invasive species prese Unknown If yes, % of forest with invasi Species:	% Shaded%  % Shaded%  ent? □ Y □ N  ives:	*Note – these should total 100%							
C. FOREST IMPACTS		C. WETLAND IMPACTS							
C1. Observed Impacts ( <i>check</i> Clearing/encroachment  Storm water runoff  Other	Trash and dumping	C1. Observed Impacts ( <i>check all that apply</i> ): ☐ Animals ☐ Clearing/encroachment ☐ Trash and dumping ☐ Storm water runoff ☐ Hydrologic impacts ☐ Other							
D. NOTES		D. NOTES							
E. INITIAL RECOMMENDA	TION								
Good candidate for conser Potential restoration candid Poor restoration or conserv	date								

PART II. OPEN PERVIOUS AREAS
A. CURRENT VEGETATIVE COVER
A1. Percent of assessed surface with:
Turf% Other Herbaceous% None (bare soil)% Trees% Shrubs % Other%
(please describe):       *Note – these should total 100%         A2. Turf:       Height:       inches       Apparent Mowing Frequency:       Frequent       Infrequent       No-Mow       Unknown
A2. Turf: Height: inches Apparent Mowing Frequency: Frequent Infrequent No-Mow Unknown
Condition (check all that apply): Thick/Dense Thin/Sparse Clumpy/Bunchy Continuous Cover
A3. Thickness of organic matter at surface:inches
A4. Are invasive species present?  Y N Unknown If yes, % of site with invasives:
Species:
B. IMPACTS
<b>B1.</b> Observed Impacts ( <i>check all that apply</i> ): ☐ Soil Compaction ☐ Erosion ☐ Trash and Dumping ☐ Poor Vegetative Health ☐ Other (describe):
C. REFORESTATION CONSTRAINTS
C1. Sun exposure:  Full sun Partial sun Shade Unknown
C2. Nearby water source?  Y N Unknown
C3. Other constraints:  Overhead wires Underground Utilities Pavement Buildings Other (please describe):
D. Notes
E. INITIAL RECOMMENDATION  Good candidate for natural regeneration May be reforested with minimal site preparation May be reforested with extensive site preparation
Poor reforestation or regeneration site
PART III. SKETCH

WATERSHED:	SUBWATE	ERSHED:	UNIQUE SITE ID:								
DATE:/	ASSESSED	BY:	CAMERA ID:								
MAP GRID	RAIN IN L	LAST 24 HOURS Y	PIC#								
A. LOCATION											
<b>A1.</b> Street names or neighborhood s	A1. Street names or neighborhood surveyed:										
A2. Adjacent land use: Residential Commercial Industrial Institutional Municipal Transport-Related											
A3. Corresponding HSI or NSA field sheet? If so, circle HSI or NSA and record its Unique Site ID here											
B. STREET CONDITIONS											
<b>B1.</b> Road Type: Arterial C	ollector [	Local Alley Other	::								
<b>B2.</b> Condition of Pavement:  Ne	w Good	l Cracked Broken									
<b>B3.</b> Is on-street parking permitted [	☐ Y ☐ N	If yes, approximate number	of cars per block:								
<b>B4.</b> Are large cul-de-sacs present?	☐ Y ☐ N										
<b>B5.</b> Is trash present in curb and gutt	,	Index Rating	g for Accumulation in Gutters								
use the index to the right to record a		Clean	Filthy								
	Sediment	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\square 3 \qquad \square 4 \qquad \square 5$								
Organ	ic Material Litter	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$								
C. STORM DRAIN INLETS AND											
C1. Type of storm drain conveyance											
C2. Percentage of inlets with catch											
Sample 1-2 catch basins per NSA/I		C3. Catch basin #1	C4. Catch basin #2								
Latitude		°"									
Longitude			<u> </u>								
LMK #											
Picture #			<u> </u>								
Current Condition		Wet Dry	☐ Wet ☐ Dry								
Condition of Inlet		Clear Obstructed									
Litter Accumulation		□Y □ N	□Y □N								
Organics Accumulation		Y	LY LN								
Sediment Accumulation		Y	Y								
Sediment Depth (in feet)		ft.	ft.								
Water Depth		ft.	ft.								
Evidence of oil and grease Sulfur smell		Y	Y								
Accessible to vacuum truck		TY N	$\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$								
D. NON-RESIDENTIAL PARKING	G LOT (>2										
D1. Approximate size: acres											
D2. Lot Utilization: Full About half full Empty											
D3. Overall condition of Pavement: ☐ Smooth (no cracks) ☐ Medium (few cracks) ☐ Rough (many cracks) ☐ Very Rough (numerous cracks and depressions)											
<b>D4.</b> Is lot served by a storm water treatment practice? Y N If yes, describe:											
<b>D5.</b> On-site retrofit potential:											



E. MUNICIPAL POLLUTANT REDUCTION STRATEGIES						
E1. Degree of pollutant accumulation in the system:  High  Medium  Low  None						
<b>E2.</b> Rate the feasibility of the following pollution prevention strategies:						
	☐ Moderate ☐ Low					
Storm Drain Stenciling: High						
Catch Basin Clean-outs:						
Parking Lot Retrofit Potential: High	☐ Moderate ☐ Low					
CATCH BASIN SKETCHES						
#1	#2					
Notes:						